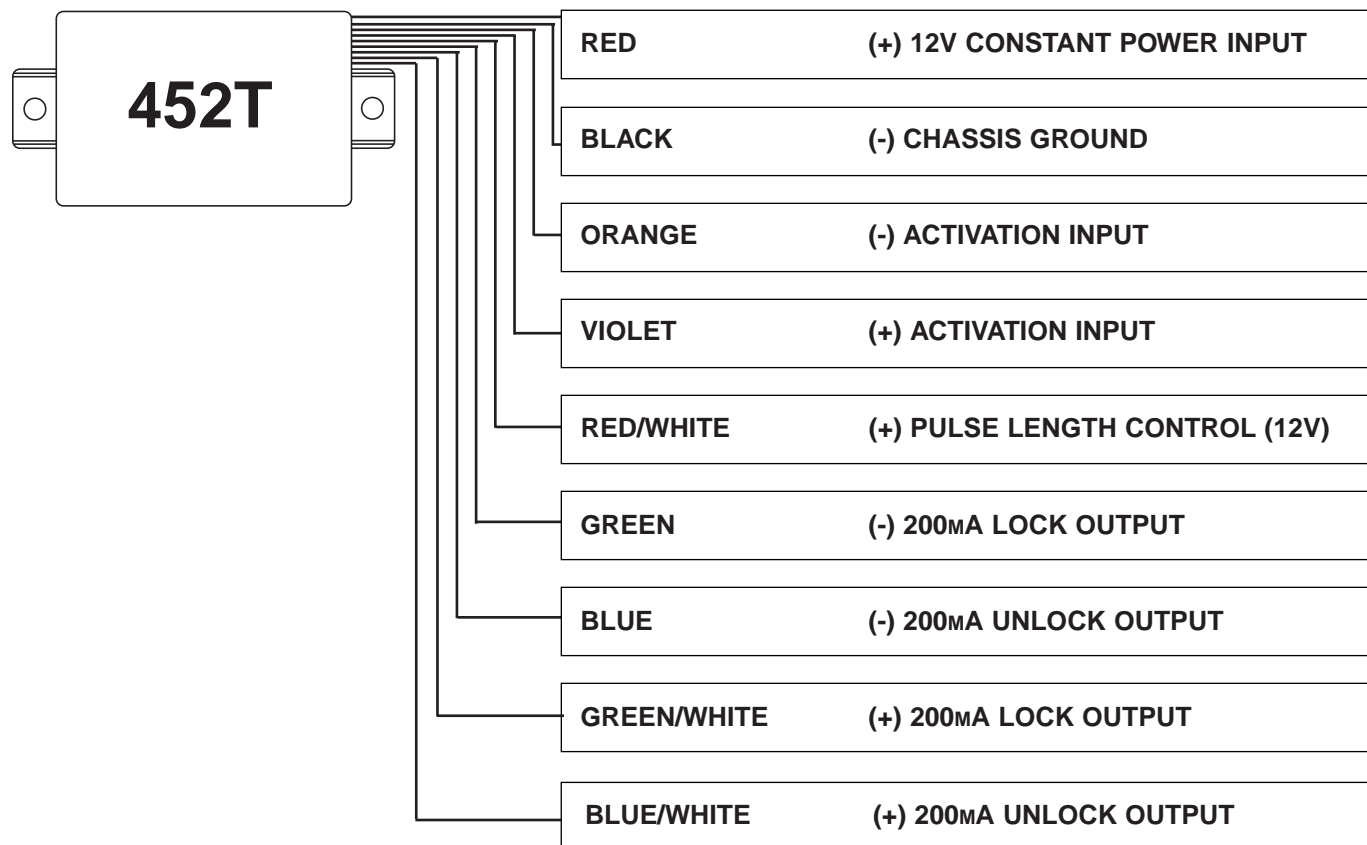


# 452T Door Lock Pulse/Double Pulse Generator

The 452T is a versatile unit that can meet door lock and other unique installation needs. It can be used as a door lock pulse generator to convert a positive or negative latching input to door lock and unlock pulses. The 452T can provide either 200mA (-) or 200mA (+) pulses for door locks, making it possible to control any relay driven factory lock system without any additional parts. Common applications include adding door locks to a unit that has a ground-when-armed output, or generating pulses for ignition controlled door locks.

The 452T can also generate two separate pulses from a single pulse input. Some newer vehicles require two pulses to unlock the doors such as: newer Nissan vehicles, Infiniti vehicles, and Volkswagen vehicles.



## WIRE CONNECTION GUIDE

**RED** (+) 12V constant power input: Connect this wire to a **fused** source of constant (+) 12V.

**BLACK** (-) chassis ground: Connect this wire to a paint free surface on the vehicle chassis.

**ORANGE** (-) activation input: If the 452T is being used to generate lock and unlock pulses, connect this wire to the ground-when-armed output of the security system. If the 452T is being used to create a double (-) pulse, connect the ORANGE wire to the (-) unlock output from the security system.

**VIOLET** (+) activation input: If the 452T is being used to generate lock and unlock pulses for ignition controlled door locks, connect this wire to a source of (+) 12V switched ignition in the vehicle. If the 452T is being used to create a double (+) pulse, connect the VIOLET wire to the (+) unlock output from the security system.

**IMPORTANT:** The ORANGE and VIOLET inputs cannot be used at the same time. Damage to the module will result.

**RED/WHITE (+)** pulse length control: When this wire is NOT connected, the outputs have a pulse duration of 0.8 seconds. The 0.8 second pulses will control most power door lock systems. To decrease the duration of the output pulses to 0.25 seconds, connect this wire to constant (+) 12V. This shorter output pulse can be used to disarm the factory security system in certain vehicles, such as the Chrysler minivan. This shorter pulse duration allows the factory alarm system to be disarmed without unlocking the doors in remote start applications. This will affect the output of both the (-) output wires, BLUE and GREEN, and also the (+) output wires, BLUE/WHITE and GREEN/WHITE.

**GREEN (-)** 200mA first (lock) output: The GREEN wire supplies a 0.8 second pulse output whenever the ORANGE or VIOLET activation wires receive input. This happens when an input of any duration is supplied to the ORANGE or VIOLET. The input can be a latch such as ground-when-armed or a pulse, such as a lock or unlock pulse.

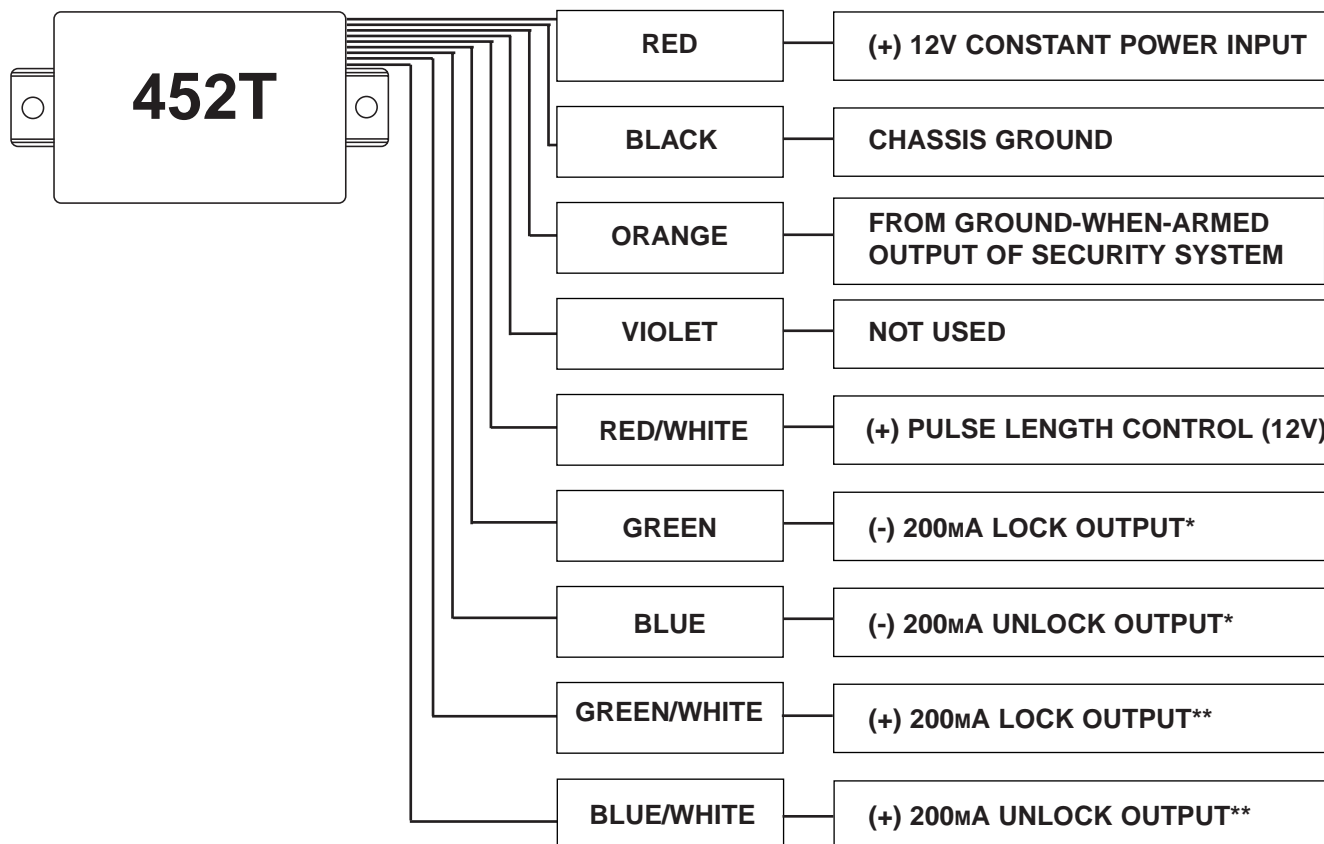
**BLUE (-)** 200mA second (unlock) output: The BLUE wire supplies a 0.8 second pulse output whenever the ORANGE or VIOLET activation wires stop receiving input.

**GREEN/WHITE (+)** 200mA first (lock) output: This wire behaves exactly like the GREEN wire, except for the polarity of the output.

**BLUE/WHITE (+)** 200mA second (unlock) output: This wire behaves exactly like the BLUE wire, except for the polarity of the output.

**IMPORTANT:** The GREEN, BLUE, GREEN/WHITE, and BLUE/WHITE outputs are not designed to drive high current loads. Do **NOT** connect directly to a motor. Damage to the module will occur.

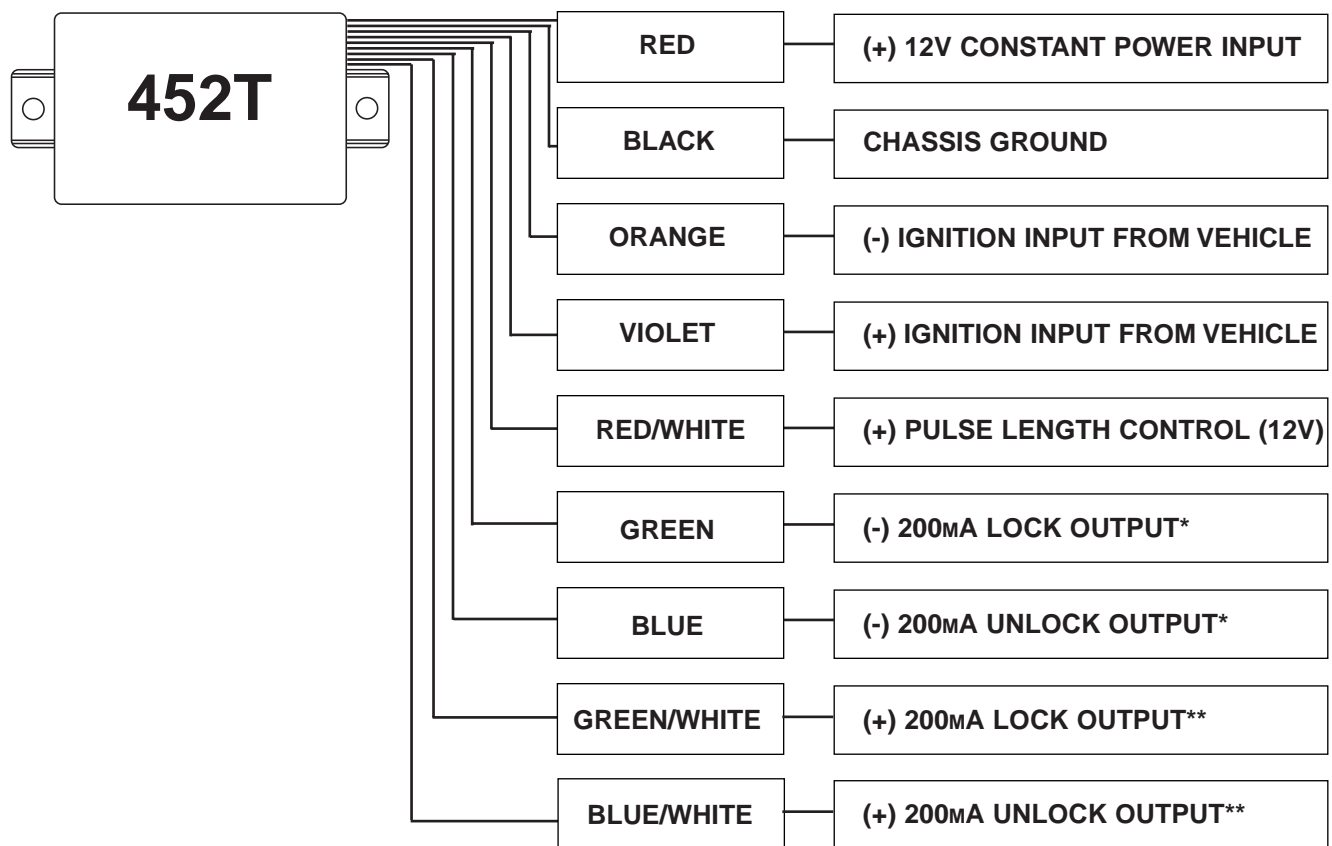
## Generating Lock/Unlock Pulses From a Ground-When-Armed Input



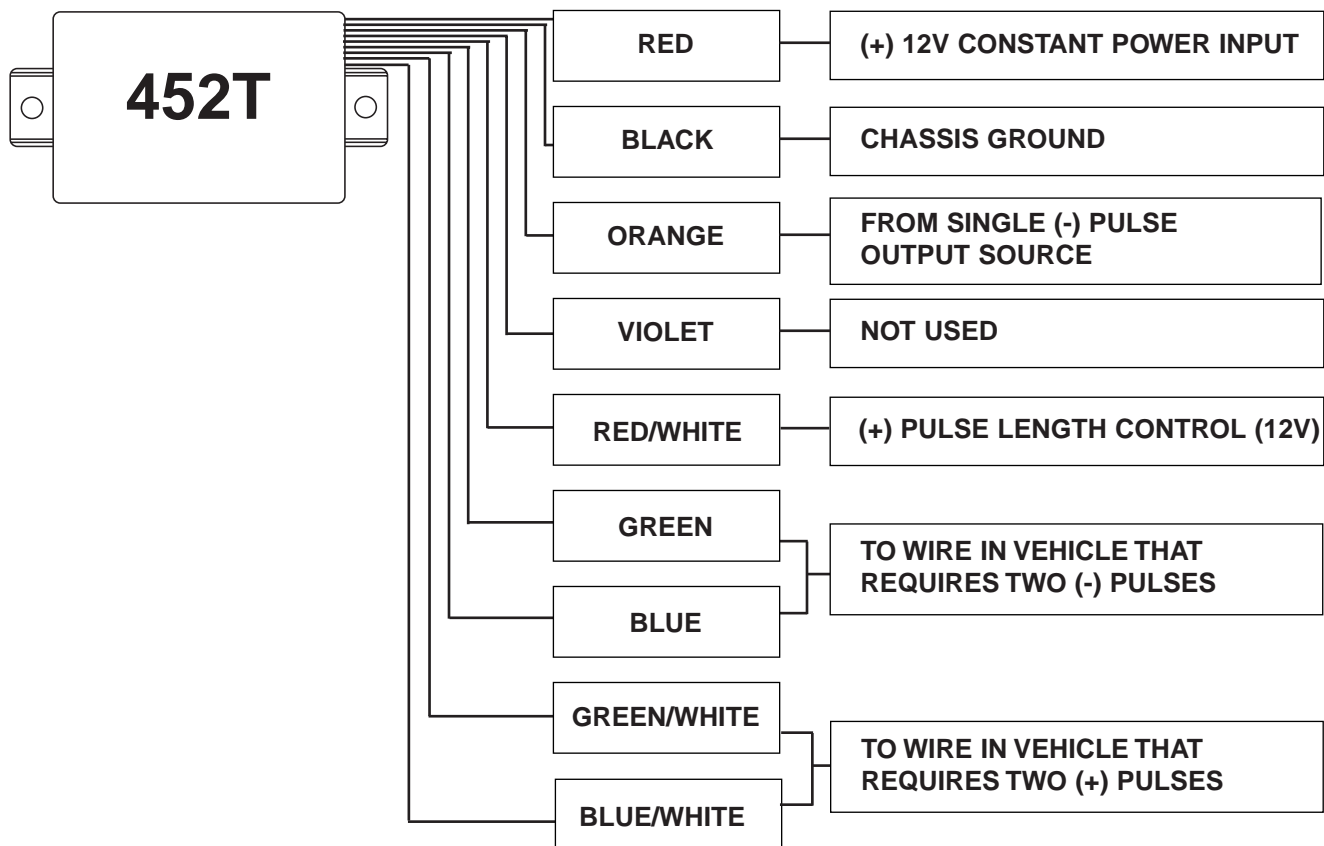
\* Use these outputs if the vehicle has (-) triggered door lock relays or if adding separate relays

\*\* Use these outputs if the vehicle has a (+) triggered door lock relay or if adding separate relays.

### Generating Lock/Unlock Pulses From Ignition Controlled Door Lock System



### Generating Two (-) or (+) Pulses From a Single (-) Input Pulse



**Generating Two (-) or (+) Pulses From a Single (+) Input Pulse**

